

**P2 E-News, Volume 1, Number 4
December 2006**

Welcome to P2 E-News!

Happy Holidays to all! In this issue of **P2 E-News** we include information on the emerging issue of pharmaceutical waste, SB 14 Reporting, a nanotech update, training opportunities, and more.

As always, please feel free to tell your friends and associates about **P2 E-News**! Anyone interested in receiving **P2 E-News** is welcome to subscribe using the DTSC Listserv webpage at <http://www.calepa.ca.gov/Listservs/dtsc/> (scroll down to DTSC **P2 E-News** and click on Subscribe).

Got ideas for future issues? Send your comments or suggestions on how we can better serve you to P2@dtsc.ca.gov, or call the Pollution Prevention Hotline at (800) 700-5854.

Pollution Prevention (P2) - Changing the way we think and act so we can reduce or eliminate the creation of waste and pollution.

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**European Parliament Votes to Adopt REACH**

On December 13, 2006, the European Parliament voted to adopt the proposed regulatory framework for chemicals known as the Registration, Evaluation, and Authorisation of Chemicals (REACH). The new regulation is expected to be formally adopted by the Council of the European Union on December 18, 2006, and is scheduled to go into effect June 1, 2007.

The goal of REACH is to improve the protection of human health and the environment through better and earlier identification of the properties of chemical substances. REACH will require manufacturers and importers to gather information on the properties of their substances and register the information in a central database. A European Chemicals Agency will be established to manage the databases needed to implement REACH, to coordinate the evaluation of chemicals of concern, and to create a public database where consumers and professionals can find hazard information.

For more information on REACH, please visit the European Commission webpage at: [http://ec.europa.eu/environment/chemicals/reach/reach\\_intro.htm](http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm). Additional information on REACH and related international programs is also available on the DTSC Green Chemistry webpage at: <http://www.dtsc.ca.gov/PollutionPrevention/GreenChemistry.cfm> (go to link and scroll down to Related International Programs section).

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Emerging Issue - Pharmaceuticals and Personal Care Products in the Environment

Detection of pharmaceuticals and personal care products in the environment is an issue of emerging concern across the nation and around the world. It's a complex issue that is compounded by the fact that there are very diverse sources for these chemicals. We use pharmaceuticals every day in so many ways...from prescription and over-the-counter drugs to diagnostic agents, nutritional supplements, and other consumer products such as fragrances, cosmetics, and sun-screen agents. We swallow them, rub them on our skin, have them injected or administer them to our pets. And finally, many of these chemicals are ending up in the environment from various routes, including sewage and from past and present disposal practices.

So why is this a problem? The U.S. Geological Survey has reported that pharmaceutical wastes (such as prescription and nonprescription drugs, antibiotics, and hormones) have been detected in water samples downstream from urban areas and livestock holding areas. This is a concern for several reasons. One is the potential risk to fish and other aquatic organisms from continual exposure to low concentrations of these chemicals. Another concern is the potential impact on human health from consumption of water containing trace concentrations of these compounds. Right now there are many unknowns regarding the impacts of these chemicals at the concentrations detected.

DTSC intends to explore the many levels of this very complex problem...from potential environmental and human health impacts...to pollution prevention and disposal considerations...to how to regulate and oversee management of these wastes. And we invite you to join us in this effort. For more information on Pharmaceutical Waste and DTSC's activities in this area, please visit the DTSC website at <http://www.dtsc.ca.gov/HazardousWaste/Pharmaceutical.cfm>.

** DTSC is planning to hold a full-day Pharmaceuticals and Personal Care Products (PPCPs) Symposium in June 2007 at the Cal/EPA building in Sacramento. Please check the DTSC Pharmaceutical Waste webpage in the coming months for more information.

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#### **Heads Up on SB 14 Reporting - 2006 Information Due September 1, 2007**

Just a reminder for anyone gathering end-of-year paperwork. 2006 is an SB 14 source reduction planning and reporting year. If you generate more than 12,000 kilograms of hazardous waste (or 12 kilograms of extremely hazardous waste) in calendar year 2006, you may be subject to SB 14 planning and reporting requirements.

The Hazardous Waste Source Reduction and Management Review Act of 1989 (known as SB 14) was enacted to encourage companies to actively consider how they can reduce the amount of hazardous waste they generate. The law requires certain hazardous waste generators to review their operations every four years and identify possible opportunities to reduce or recycle their hazardous waste. Each generator subject to SB 14 needs to prepare 3 documents this year: 1) a Source Reduction Evaluation Review and Plan; 2) a Hazardous Waste Management Performance Report; and 3) a Summary Progress Report. The plan and reports are then kept onsite for public or regulator review. Only the summary progress report must be submitted to DTSC by September 1, 2007.

For more information on SB 14, its requirements, and guidance for preparing plans and reports, please visit the DTSC website at:

[http://www.dtsc.ca.gov/PollutionPrevention/index.cfm#Hazardous\\_Waste\\_Source\\_Reduction](http://www.dtsc.ca.gov/PollutionPrevention/index.cfm#Hazardous_Waste_Source_Reduction).

DTSC will also be holding SB 14 planning and reporting training workshops starting in Spring 2007. Workshop schedules and location information should be available by late January, so please keep checking the website. Facilities may also call DTSC at (916) 322-3670 for more information.

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******Nanotech Update******

DTSC NANOTECHNOLOGY SYMPOSIUM - MARCH 8, 2007

Save this date! DTSC is hosting a free, half-day Nanotechnology Symposium on March 8, 2007 at the Cal/EPA building in Sacramento. This first of several planned symposia on nanotechnology will address basic questions such as:

- (1) What is - and what isn't - nanotechnology?
- (2) How is nanotechnology being used in California, and what are the potential uses being investigated?
- (3) What are the potential health and environmental impacts associated with nanotechnology?

The symposium is open to the public and will also be webcast. More information on symposium speakers and attendee registration will be posted in early 2007 on the DTSC Nanotechnology webpage at: <http://www.dtsc.ca.gov/TechnologyDevelopment/Nanotechnology.cfm>. For more information on the symposium, or on nanotechnology in general, please contact Suzanne Davis at (916) 327-4206.

AMERICAN BAR ASSOCIATION (ABA) NANOTECHNOLOGY TELECONFERENCE SERIES

The ABA's Section of Environment, Energy, and Resources is presenting an excellent teleconference series addressing the relationship of core federal environmental statutes to applications of nanotechnology. The next sessions in the series are:

January 16, 2007 - Nanotechnology and the Clean Air Act (CAA).

February 15, 2007 - Nanotechnology and the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

March 29, 2007 - Nanotechnology and the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

The sessions are approximately 1.5 hours long and are open to anyone. Cost per session is \$80 for government, academic or public interest representatives, and \$110 for general public. For more information on the teleconference series, as well as the Section Nanotechnology Project reviews and briefing papers, please visit the ABA website at <http://www.abanet.org/enviro/nanotech/>.

ADDITIONAL NANOTECHNOLOGY RESOURCES

The Environmental Law Institute (ELI) is a non-profit, non-partisan environmental education and policy research center that provides information, publications, training, research programs, and policy recommendations to environmental leaders in government, industry, public interest groups, and academia. ELI has also established a Nanotechnology Initiative in response to the emerging need for an effective environmental, health, and safety governance structure for nanotechnologies. ELI is currently conducting research on legal aspects and public information needs associated with governance of nanotechnology. For more information on ELI's nanotech research, publications, and information seminars, please visit the ELI website at <http://www2.eli.org/research/nanotech.htm>.

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#### Training Opportunities

\*\*REGIONAL ENVIRONMENTAL BUSINESS RESOURCE ASSISTANCE CENTERS (REBRAC)\*\*

The following class is being offered by the LA/Orange Counties REBRAC in conjunction with North Orange County Community College District, DTSC, and the local Certified Unified Program Agencies (CUPAs). For more information, or to register, please contact Perla Fickenscher at (714) 808-4620, or Taffy Kennedy at (714) 808-4613. The class is being held at 1830 W. Romneya Drive, Anaheim, California 92801.

#### HAZARDOUS WASTE MANAGEMENT IN CALIFORNIA

The course will cover the following topics: waste identification; hazardous waste generator standards; container & tank standards; preparedness, prevention and training plans; transportation; onsite treatment; recycling in California; universal waste rule standards; pollution prevention and best environmental practices; SB14; and basic hazardous waste inspection.

Instructor: Nabil Yacoub

Cost: \$75 per person

Date: Wednesday, January 10, 2007

Time: 9:00 am - 3:30 pm

#### \*\*DTSC UNIVERSAL WASTE/E-WASTE NOTIFICATION AND REPORTING WORKSHOP\*\*

This is a useful class for anyone who handles, collects or recycles universal waste electronic devices or cathode ray tube (CRT) materials. DTSC is holding a training workshop on the new online reporting system for submittal of notifications and annual reports required by persons engaged in the collection, handling and/or treatment of universal waste electronic devices or CRT materials. The workshop will cover existing notification and annual reporting requirements as well as provide a demonstration of the new online system.

Cost: Free!!

Date: Friday, January 12, 2007

Time: 10:00 am - noon

Location: Cal/EPA Headquarters, Sacramento

The workshop is free and open to the public. It will also be available via audio webcast. For more information, please visit the DTSC website at

[http://www.dtsc.ca.gov/HazardousWaste/EWaste/upload/E\\_Waste\\_Training.pdf](http://www.dtsc.ca.gov/HazardousWaste/EWaste/upload/E_Waste_Training.pdf), or contact Linda Sargent at (916) 323-9219, or by email at [LSargent@dtsc.ca.gov](mailto:LSargent@dtsc.ca.gov).

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Falconry as a Bird Control at Tajiguas Landfill

Now here's an interesting green technology that also helps prevent pollution!! DTSC staff and Tri-County Pollution Prevention Committee members recently enjoyed a working demonstration of the Santa Barbara County Department of Public Works' unique and successful landfill bird control program at the Tajiguas Landfill in Goleta. Located near the coast, scavenging seagulls had been a tremendous problem at the landfill. Windshields on heavy-equipment were covered with bird droppings, obscuring the operators' vision, and there were health concerns about worker exposure to the high volume of droppings. Surrounding areas were also impacted because the thousands of gulls scavenging at the landfill were roosting in a nearby canyon and beach area. Significant water pollution at Arroyo Quemada beach was attributed to bacteria from all the seagull droppings.

But that's all changed since Santa Barbara County started using the falcons. The program takes advantage of the congregating birds' natural fear of falcons, a bird of prey that hunts birds and small animals. A high flying falcon acts as a deterrent to other birds because they are naturally frightened and leave the area immediately. Mr. Alan R. Colussy II, President of Frugal Falconer,

demonstrated how the falcons are used to make regular passes over the landfill to scare off the seagulls. The falcons are used full time at the landfill, six days a week, from dawn to dusk. Not only has use of the falcons successfully controlled seagulls at the landfill, it has also helped stop the water pollution at Arroyo Quemada beach. Recent water tests at the beach show significant improvement in water quality since the falcon program at Tajiguas was initiated.

The yearly cost for this bird management option is approximately \$110,000. However, this cost represents a fraction of what it might cost the county to mitigate seagull nuisance and pollution from droppings if the birds were not effectively controlled. In addition to bird control at landfills, falconry is also used at a number of air force bases to prevent catastrophic events caused by birds getting into aircraft engines. For more information on falconry uses, please contact Alan Colussy at (724) 323-7409 or by email at acolussy@yahoo.com.

For more information on the Tajiguas Landfill in general, or Santa Barbara County's resource recovery and waste management programs, please visit the County of Santa Barbara website at <http://www.countyofsb.org/pwd/rrwmd/index.htm>.

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**P2 HazWaste Corner**

**\*\*Household Batteries – Don't Throw Them In The Trash!\*\***

Millions of batteries will be used during the holidays, so this is a good time to quickly review household battery waste management requirements.

In a nutshell, virtually all rechargeable and most other types of household batteries (i.e., AA, AAA, C, D, and 9-volt cells) must now be handled as Universal Waste after they have been used or run down. This is because the batteries contain corrosive or toxic substances, including metals such as mercury, lead, nickel, cadmium, zinc, copper, and silver. So instead of disposing of them with your municipal garbage, you must collect them and take them to a battery collection center, household hazardous waste facility, or ship them to a recycler at least once a year.

The California Health and Safety Code allows a disposal exception for carbon zinc dry cell batteries that do not exhibit any hazardous characteristics other than zinc content; however, recent studies demonstrated that all spent dry cells contain corrosive electrolyte...something that anyone who has had a radio or flashlight ruined by leaking batteries can confirm.

Since carbon zinc batteries can be recycled along with the alkaline cells, the safest and most environmentally beneficial thing to do is to collect ALL household batteries and send them off as universal waste.

To reduce your battery waste even more, use rechargeable batteries in place of disposables whenever possible. Check the instructions for the device using the batteries (or the manufacturer's website) to make sure that you can use rechargeable batteries, and be aware that some devices need to be operated on a certain type of rechargeable battery.

For more information about how to manage Universal Waste household batteries, please visit the DTSC website at: [http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/Res\\_Batteries.cfm](http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/Res_Batteries.cfm). For comprehensive information on Universal Waste laws, regulations, and management, please go to <http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/index.cfm>.